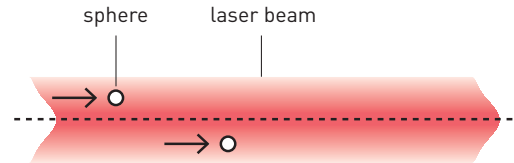
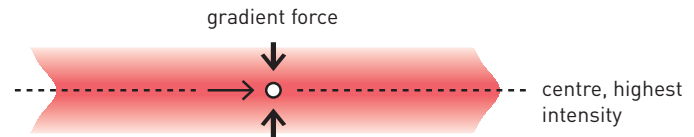


# Ashkin creates his light trap

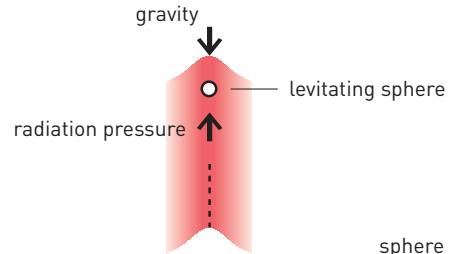
- 1 Small transparent spheres are set in motion when they are illuminated with laser light. Their speed corresponds to Ashkin's theoretical estimation, demonstrating that it really is radiation pressure pushing them.



- 2 One unexpected effect was the gradient force that pushes the spheres towards the centre of the beam, where the light is most intense. This is because the intensity of the beam decreases outwards and the sum of all the forces pushing the spheres sends them towards its centre.



- 3 Ashkin makes the spheres levitate by pointing the laser beam upwards. The radiation pressure counteracts gravity.



- 4 The laser beam is focused with a lens. The light captures particles and even live bacteria and cells in these optical tweezers.

